Washington State Ferries
Long-Range Strategic Plan

Monday, June 27, 2005
Kitsap Conference Center, Bremerton
100 Washington Avenue
7 p.m. to 8:30 p.m.

Tuesday, June 28, 2005
PSRC Boardroom, Downtown Seattle
1011 Western Ave, Suite 500
12 p.m. to 1 p.m.

Thursday, June 30, 2005
Hall at Fauntleroy, West Seattle
9131 Fauntleroy Way SW
6 p.m. to 7 p.m.

Your Ferry Future...

Planning now for 2011-2030

Introduction

Purpose of Tonight's Meeting

- Share information on key challenges facing WSF – ridership growth, terminal and vessel capacity constraints, boat waiting times, roadway traffic impacts, financial constraints.
- Discuss specific service choices for addressing key chokepoints and bottlenecks.
- Answer questions and obtain input on the strategic choices.

Why is WSF Updating its Long-Range Strategic Plan?

- WSF's last Plan was completed in 1999 – much has changed since, including the Legislature's implementation of the I-695 funding cuts, which significantly reduced funding for WSF operations.
- The Ferries are already full on many sailings and more growth is coming.
- The System has aging vessels and terminals which need upgrading just to keep pace with current demand.
- WSF must determine how to best serve the public given all of the System's needs and limited financial resources.
- Communities' plans, and WSF's plans for service and investments, are related.

Why Do We Need a Plan?

The WSF Plan will become a part of the Washington Transportation Plan (WTP), scheduled for adoption by the end of 2005. The WTP is required by state law, and will form the basis for setting the state transportation system's investment priorities.

Why Plan Now for 2011 and Beyond?

Ferry service improvements take time to implement. Because of long lead times required for building new vessels and improving terminals, and the long-term nature of such investments, WSF is planning now for the service it will provide in 2011-2030.

Your Ferry Future...

Planning now for 2011-2030

Purpose and Scope of Plan

When Will the Plan Take Effect, and What Will it Do?

When the Plan is completed in December 2005, it will guide future WSF decisions on services and investments:

- **Services:** it will have a route-specific program including route structures, frequencies and carrying capacities.
- **Investments:** it serves as a 25-year strategic investment plan for vessel and terminal improvements.

WSF is making investments now in vessels and terminals, based on its current Capital Program.

- New vessels have been ordered to replace older vessels that are being retired.
- Preservation work and improvements are being planned for terminals at Anacortes, Bainbridge Island, Port Townsend and Mukilteo, on varying schedules beginning in 2005.
- The Eagle Harbor Maintenance facility requires major repairs to continue efficient upkeep of WSF vessels and terminals. Construction will run from mid-2005 through mid-2009.

Washington State Ferries Routes by Service Area

Key Constraints

Multiple Constraints Affect WSF's Ability to Handle Growth

WSF is a Financially Constrained System

- Significant limits on its financial resources require WSF to look closely at the operating and capital costs of any possible choice.

Systemwide Chokepoints and Bottlenecks Constrain WSF's Capacity and Efficiency

- **Fauntleroy Terminal:** Operates at capacity now and is not able to accommodate projected growth in demand from Vashon/Southworth. Expanding the terminal is not an option, according to the City of Seattle.
- **Colman Dock** in downtown Seattle is a hub for the system. WSF is studying options for a new facility on the site to improve operating efficiencies and accommodate increasing demand.
- **Central Sound Passenger Service:** High growth in passenger demand is expected on Central Sound routes.
- **Weekends/Summer Season:** Continuing growth in the recreational travel market on weekends and during the summer on Edmonds-Kingston, Whidbey Island routes and Anacortes-San Juan Islands routes presents capacity challenges in those corridors.
- **San Juan Islands** terminal constraints include one-slip terminals in the Islands and the limited ability of adjacent road systems to handle ferry traffic.

Landside Constraints are Major Factors

- Traffic congestion issues in downtown Seattle and at Fauntleroy will be major issues for the City of Seattle.
- SR 305 on Bainbridge Island has significant capacity and congestion issues that will be considered in the Plan.
- Impacts of the Tacoma Narrows Bridge are also considered.
- Single-slip and single-lane loading at the San Juan Islands Terminals.
- Multimodal terminals at Anacortes, Edmonds, and Mukilteo are being designed to mitigate many of the current landside impacts on these communities.

Your Ferry Future...

Planning now for 2011-2030

Growth in Ridership

Systemwide Growth Expectations

- WSF's "baseline" growth projections rely on certain assumptions about service and fares:
  - Service is assumed to be the same as today's, except for the introduction of replacement vessels already purchased.
  - Fares are assumed to continue increasing 5% per year through 2009, with annual increases to match inflation thereafter.
- Given those assumptions, significant growth in ferry ridership is projected through 2030.
  - Westbound vehicle traffic during the evening commute period is projected to rise 24% (1,629 additional vehicles) by 2030.
  - Westbound total ridership during the evening commute period is projected to rise 64% (11,015 additional passengers) by 2030.

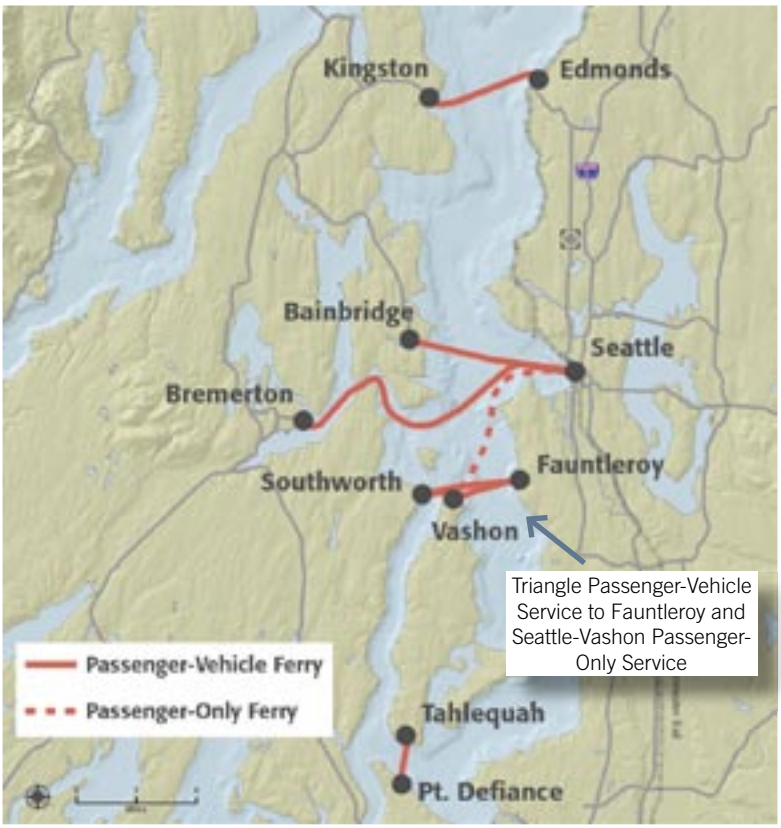
What do ridership projections take into account?

WSF's projections of future ridership are based on a combination of a regional computer model developed by the Puget Sound Regional Council and population data supplied by the Office of Financial Management (OFM) for outlying counties. It includes origin and destination information for all cross-Sound trips, based on population and employment projections. Projections about commuters' decisions also take into account a variety of factors including vessel capacities, driving times and fares.

Historical Context of Systemwide Growth

- Between 1987 and 1999, systemwide ferry ridership grew by approximately 50%, as a result of population growth and relatively flat fares (fares declined in inflation-adjusted terms.)
- Since 1999, ridership has declined about 10% throughout the system, a result of the service cutbacks and fare increases that followed voter approval of the tax limits in Initiative 695.
- As of 2004, systemwide ridership was at a similar level as in 1995.
- Future population growth west of Puget Sound is expected to increase demand for ferry service.

Current South and Central Sound Route Structure



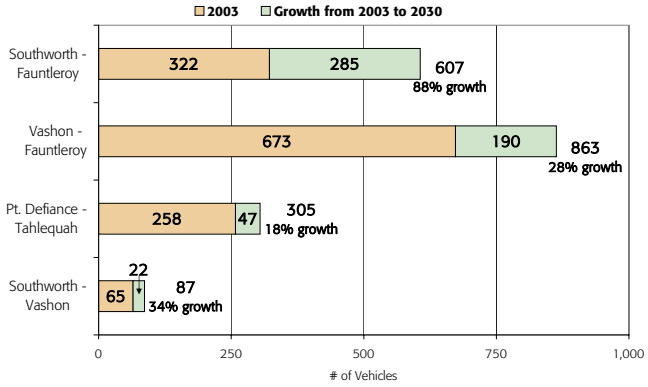
Growth in Ridership

Growth in the South and Central Sound

- Growth on the South and Central Sound routes is projected to be especially high, as a result of population and economic growth in Kitsap County.
- Total peak-period westbound traffic on South Sound routes is projected to rise 41% for vehicles and 62% for total riders, by 2030.
- Central Sound westbound routes are expected to rise 23% for vehicles and 64% for total riders by 2030.

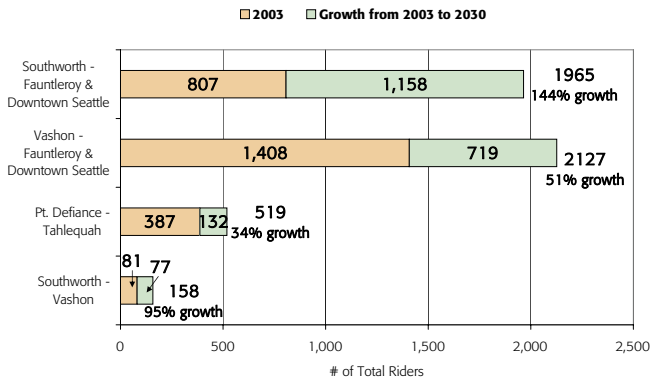
South Sound Vehicles in 2003 and Projected 2030

4-Hour PM Westbound Commuting Peak



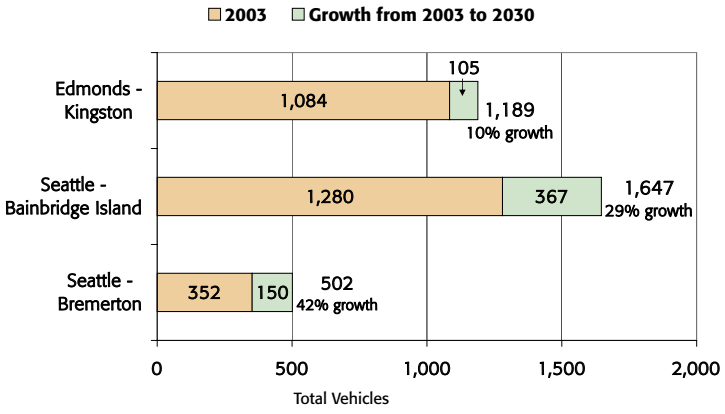
South Sound Ridership in 2003 and Projected 2030

4-Hour PM Westbound Commuting Peak



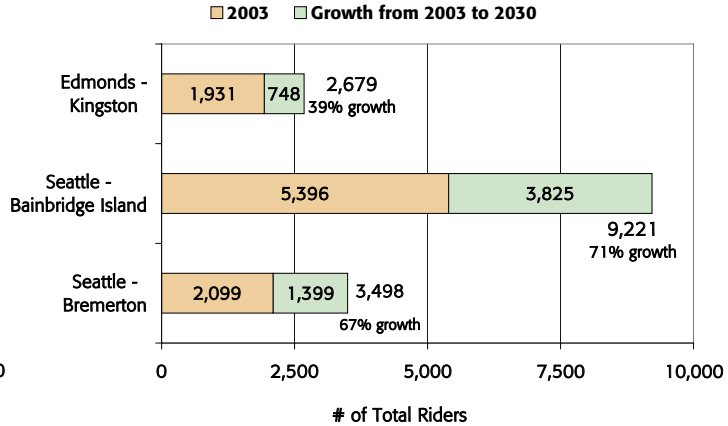
Central Sound Vehicles in 2003 and Projected 2030

4-Hour PM Westbound Commuting Peak



Central Sound Total Ridership in 2003 and Projected 2030

4-Hour PM Westbound Commuting Peak



South Sound Corridor: Challenges and Choices

Situation Assessment and Key Challenge

- The key challenge for WSF in the South Sound Corridor will be accommodating ridership from Southworth and the north end of Vashon Island to downtown Seattle.
  - Fauntleroy Terminal is nearly at capacity during peak periods and cannot be expanded.
  - Demand analysis shows that Fauntleroy vehicle traffic will increase by 48% (475 vehicles during the 4-hour peak commute period) by 2030.
- Traffic on the Southworth-Vashon part of the route will not exceed the capacity of the route's current vessels through 2030.
- Currently planned vessel up-sizing on the Point Defiance-Tahlequah part of the route to an Evergreen State class sized vessel will be adequate to serve projected ridership growth through 2030.

Choices Evaluated for Addressing Growth in Demand for the South Sound

Is there a way to avoid the Fauntleroy congestion problem by adding service outside of the South Sound to draw Fauntleroy traffic away?

No. Adding a third boat on the Bremerton route reduces 2030 Fauntleroy traffic by only 125 vehicles. Adding a Seattle-Southworth passenger-only service draws a significant number of walk-ons, but reduces 2030 Fauntleroy car traffic by only 34 vehicles.

Choice #1: Reconfigure South Sound Service by Redirecting the Southworth Route

Creating a Southworth-Seattle passenger-vehicle route is the most promising choice to address constraints at Fauntleroy dock:

- Reduces vehicle traffic at Fauntleroy (826 peak period vehicles by 2030 vs. 995 today).
- Greater convenience for Southworth riders. Average total trip time for Southworth riders would be 21% shorter (30 minutes); 64% of all Southworth trips would have a shorter total trip.
- Total South Sound vehicle capacity would increase by 33%, with capacity added where it is most needed - between Vashon-Fauntleroy and Southworth-Seattle.
- Operating costs under this choice would be 44% higher than existing service, but this choice is the least expensive of any of the reconfigured service choices that solve the Fauntleroy problem.

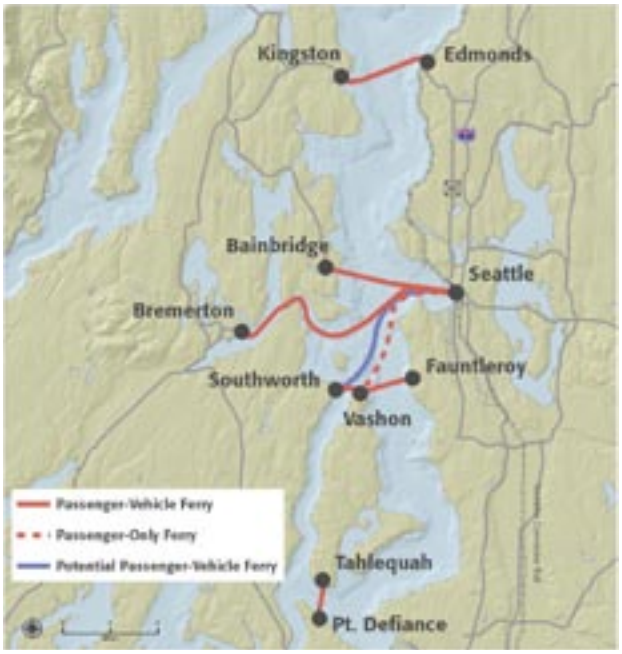
South Sound Corridor

Implications of Developing a New Southworth-Seattle Passenger-Vehicle Route

- Distribution of cross-Sound traffic between WSF and the Tacoma Narrows Bridge is projected to be unaffected by a new Southworth-Seattle route. Currently 24% of cross-sound vehicle trips use ferries, and the same ratio is projected for 2030 with a Southworth-Seattle route.
- The City of Seattle would need to support three ferry routes at Colman Dock. Reducing traffic through Fauntleroy by bringing direct vehicle service from Southworth to Seattle may be the best balance of impacts within the city.

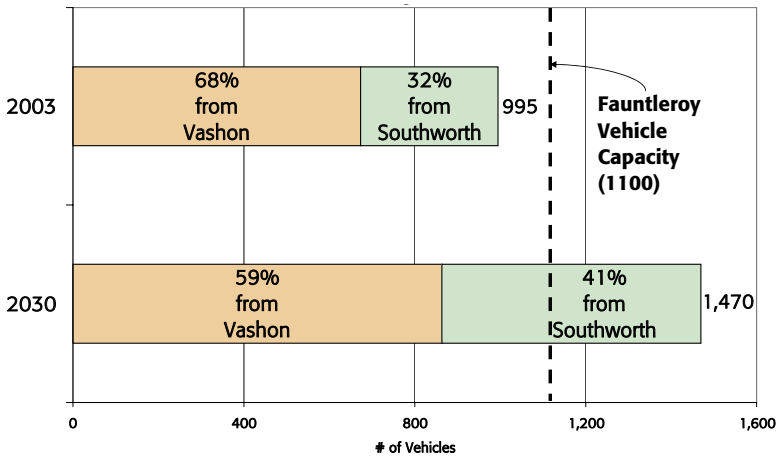
Potential Service Choice:

Break up the Triangle, provide direct passenger-vehicle service between Southworth-Vashon, Southworth-Seattle, and Vashon-Fauntleroy



Total Vehicles from Fauntleroy, 2003 & 2030

4-Hour PM Commuting Peak, Westbound, No Service Changes



Choice #2: Reconfigure South Sound Service in Other Ways

Alternate Sailings from Southworth and/or Vashon between Downtown and Fauntleroy:

- Solves capacity problem at Fauntleroy only if both routes have alternate sailings.
- Results in less customer-friendly service, as alternating sailings would go to different destinations and the frequency of service between any two ports drops significantly, resulting in greater wait time between trips.

Close Fauntleroy and Redirect Both the Southworth and Vashon routes to Seattle:

- Eliminates pressure at Fauntleroy, but is a more expensive way to serve Vashon.
- Takes Vashon riders to downtown, giving more than 50% of the riders a longer total trip time.
- Would result in too many vessels trying to off-load at the same time at Colman Dock, raising waterfront integration and traffic challenges

Central Sound Corridor: Challenges and Choices

Key Challenges are Growth-Related

- Vehicle traffic on the Seattle-Bremerton and Seattle-Bainbridge routes is projected to grow significantly by 2030 (42% and 29%, respectively).
- Total ridership (vehicle drivers, foot passengers, and passengers in vehicles) on the Bremerton and Bainbridge routes is also expected to grow significantly, with 67% more riders on Bremerton and 71% on Bainbridge by 2030.
- Level of service standards will be challenged:
  - State transportation policy states that walk-on passengers should have a 0-boat wait. This standard effectively applies to total passengers.
  - Total passenger ridership is projected to outpace this standard by 2013 on Bremerton and by 2015 on Bainbridge – assuming current or planned seated capacity.

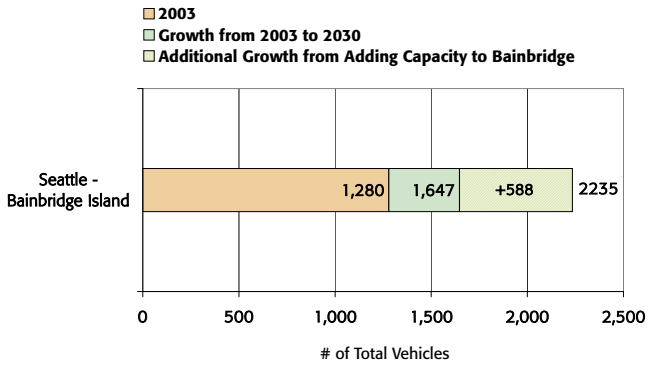
The Bainbridge Challenge

- If vehicle capacity were added to the Seattle-Bainbridge route, it would attract more vehicles to that route creating more congestion on SR 305 instead of improving ferry waits.
- The growth in vehicle trips resulting from a third boat is estimated to exceed total growth in passengers, suggesting that the improvement in vehicle capacity would shift some customers from a walk-on mode to a drive-on mode.

Central Sound Vehicles in 2003 and Projected 2030

4-Hour PM Westbound Commuting Peak

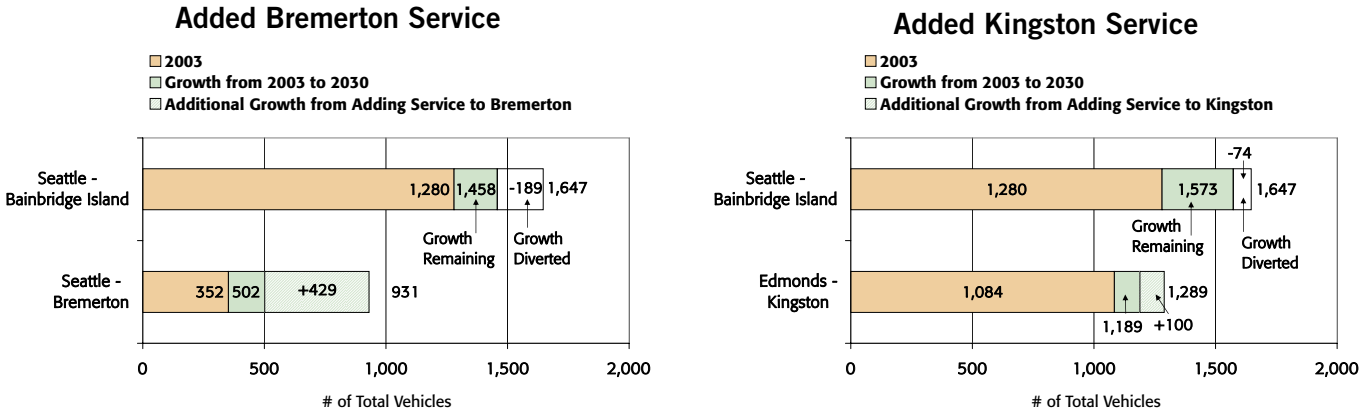
Added Bainbridge Service



- Some of the Bainbridge growth could be diverted by adding more frequent service to Seattle-Bremerton or Edmonds-Kingston:

Central Sound Vehicles in 2003 and Projected 2030

4-Hour PM Westbound Commuting Peak

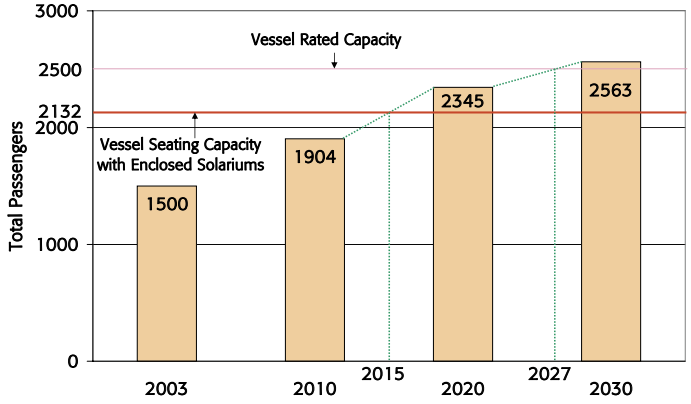


Choices for Passenger Capacity in the Seattle-Bainbridge Route

Increase capacity by adding seats to the existing Mark II boats

- Current seated capacity on this vessel class is 1,732; the Coast Guard rated capacity is 2,500.
- Vessel improvements to enclose the upstairs solariums would increase capacity to 2,132.
- WSF is exploring the feasibility of raising the seating capacity to 2,500 passengers and the overall rated capacity to 3,000.

Seattle-Bainbridge Peak-of-Peak Sailing (5:30 PM)



Your Ferry Future...

Planning now for 2011-2030

Central Sound Corridor

Address passenger growth on the Bainbridge route by diverting it to a new passenger-only service from Seattle to Kingston

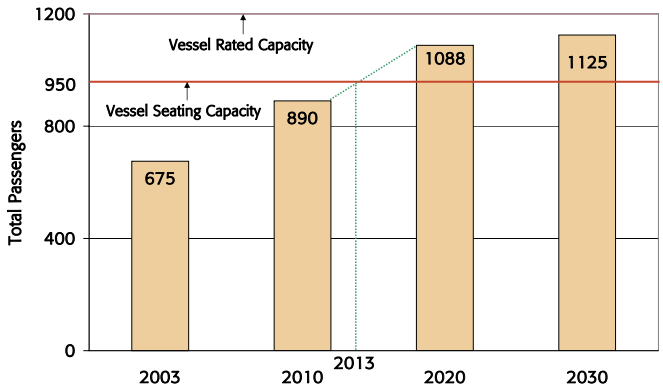
- A passenger-only service would reduce Westbound PM peak passengers on Seattle-Bainbridge by 1,666 compared to the baseline projection for 2030, (a reduction of 18%) if the passenger-only fares were held to no higher than the Central Sound fares and 3-boat service (30 minute frequency) was offered. Diverted traffic drops to 1,574 if passenger-only fares are 1.5 times Central Sound fares.
- The resulting reduction in Bainbridge ridership could be sufficient to delay the passenger capacity issue to the 2025-2030 time period.

Seattle-Bremerton Route Passenger-Capacity

One way to meet passenger demand is to swap the Expanded Issaquah class vessel for a larger vessel with seated capacity for 1200 or more passengers

- Current seated capacity on the Expanded Issaquah class vessel that serves the Seattle-Bremerton route is 800 passengers. This vessel is scheduled to be replaced by 2010 with one of the new vessels which will have seating for 950. When demand for ferry service from passengers exceeds this capacity, another vessel in the WSF system with 1200 or more seats could be substituted. The existing Super class vessels in WSF's fleet seat approximately 1500.

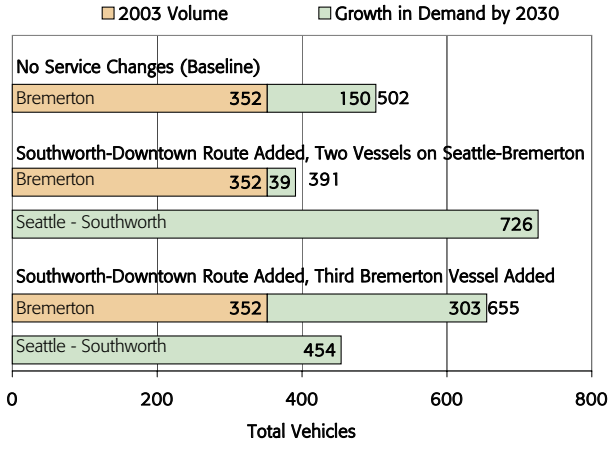
Seattle-Bremerton Peak-of-Peak Sailing (5:30 PM)



The Relationship Between Seattle-Bremerton and Seattle-Southworth

- If the Southworth passenger-vehicle is ferry ultimately connected to downtown instead of Fauntleroy, it could also accommodate some of the growth that otherwise could go to Seattle-Bremerton. This could delay the need to further upsize passenger capacity to Bremerton or add vehicle capacity.
- Conversely, adding a third vessel to Bremerton could delay the need add further capacity beyond two vessels on a Seattle - Southworth route.

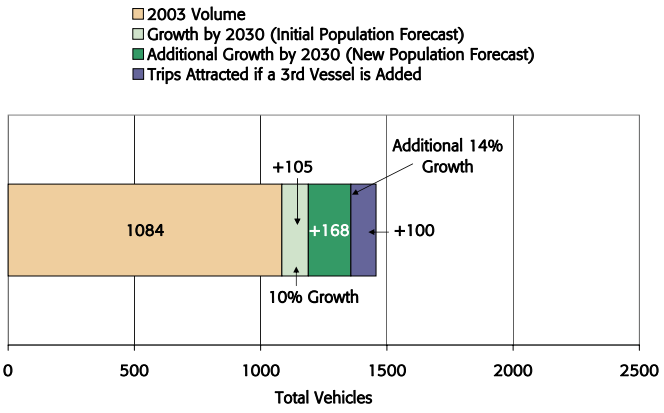
Seattle-Bremerton Vehicle Demand Growth with a Seattle-Southworth Service



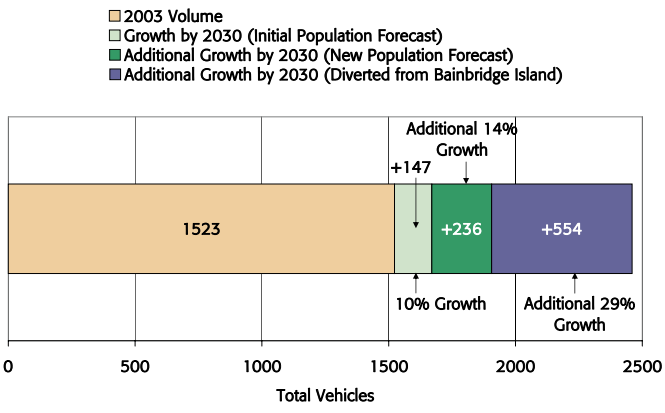
Edmonds-Kingston Route

- Initial weekday peak forecasts indicate a growth rate of 10% by 2030.
- Revised population forecasts could increase demand another 14% triggering the need for a mid-sized (Expanded Issaquah) vessel to operate as a third boat.
- If no further vehicle capacity is added for Seattle-Bainbridge, then peak summer weekend recreation demand to the Olympic Peninsula (an additional 29% growth forecast for Seattle-Bainbridge) needs to be accommodated through Edmonds-Kingston and requires the addition of a larger third vessel in the summer months.

Edmonds Growth Scenarios
Westbound PM Peak Vehicles
(Tuesday in May)



Edmonds Growth Scenarios
Peak Westbound PM Peak Vehicles
(Friday in August)



What Will Happen Next With These Service Choices?

After examining demand for ferry service in the South and Central Sound Corridors, and evaluating various service choices to meet that demand within WSF's constrained system, certain choices appear at this time to be more promising than the others. WSF is seeking input on all of the choices (see next page), and will be carrying forward these findings, along with public comment, as a systemwide plan is drafted. Because different service choices can have different implications for the WSF system as a whole, the choices highlighted by the South and Central Sound process may or may not appear as part of the recommended systemwide service plan in the draft Plan.